Scientific Illustration A Guide for the Beginning Artist

By Zbigniew T. Jastrzebski, senior scientific illustrator, Field Museum of Natural History, Chicago

Scientific Illustration introduces you to the technical aspects of drawing and painting any subject matter—whether it be pottery shards or a grain of pollen. Emphasizing that scientific illustration is an art in the service of science, this book directly involves you in both observation and the transportation of the subject to paper. It covers every phase of drawing for a specific, professional purpose and includes:

- A clear explanation of the drawing and painting process
- Descriptions of basic techniques and tools
- A detailed discussion of the precise steps leading to a finished rendering
- Projects to feature in your portfolio
- Drawing exercises
- Tips on subject areas in which you can profitably specialize.

—from the book

Prentice-Hall, 1985, 319 pages, 11" x 8½", paperback, \$24.95

1719 N Street, NW Washington, DC 20036	r Service
Please send copy(in tific Illustration. I include a ble to Science News Bookice for \$24.95 plus \$1.00 has \$25.95) for each copy. Doronly	a check pay- cOrderServ- andling (total

Name	 	
Address	 	
City		

State

Zip

RB434

IBM PC & APPLE II USERS

Dramatic advances are being made in scientific tools for personal computers. Jandel Scientific specializes in software and peripherals for:

- Planimetry, digitizing
- Interactive Statistics
- Dynamic System Simulation
- Computer-generated lecture Slides
- And more . . .

Call us and let our technical advisors help you find the product you need. Or write or call for our FREE catalog.

JANDEL SCIENTIFIC

2656 BRIDGEWAY SAUSALITO, CA 94965

CALL TOLL-FREE 800-874-1888 IN CALIF. CALL 415-331-3022

Columbia University Presents The History of the World in One Brilliant Volume!

This classic work represents the best efforts of Columbia University's most renowned scholars. Its scope is monumental, covering all aspects of our history from the beginning of the universe to the present day. As impressive as the scope is the book's remarkable depth, quality, and balanced vision.

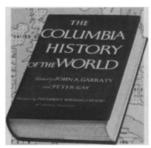
The Story Behind the Columbia History

The creation of the Columbia History was among the most important scholarly projects of recent years. A team of 40 Columbia professors colaborated on it, including historians, economists, political scientists, sociologists, biologists and astronomers. Each scholar contributed sections on his subject or period of expertise. Editors Peter Gay and John A. Garraty, both eminent historians and writers, interwove the material into a cogent narrative of the world's history.

A Book of Permanent Value—for Only \$9.95

Over the years, you'll turn to the Columbia History to explore new areas of interest and reread the sections that have always fascinated you. You will have an ever-growing understanding of Western civilization's origins and progress, plus an expanding awareness of non-Western history and culture. The Columbia History is a perfect addition to anyone's library because it is both a well-written historical narrative and an authoritative reference.

Most books of this scope, size, and permanent value sell for exorbitant prices, but thanks to Barnes & Noble's 60% discount, the Columbia History costs only \$9.95. Surely, that's a small price to pay for life-long investment in learning and a reference you'll turn to often.



Why Everyone Needs a World History

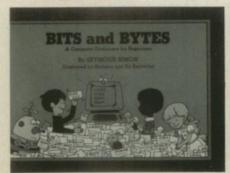
Let's face it—most of us, whatever our educational credentials, have large gaps in our knowledge of history. There are whole eras and countries we know nothing about even in familiar subjects, we're sometimes a bit hazy on the sequence of events. A book of world history, particularly an excellent one like the Columbia, can fill the gaps in our learning and give us a solid chronological framework. Illustrated with maps. 1.237pp.

\$2			
	□Visa	☐ MasterCard	

Account #		Ex	p.
Signature			
•	The Worl	d's Largest Bo	okstore.
	Signature \$2	Charge It! □Visa Account # Signature © 198	\$25.00 \$9.9 > Charge It!

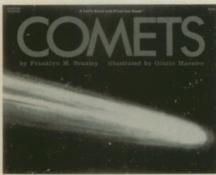
Introduce the children in your life to science through these books for ages 4-8 from Harper & Row publishers.





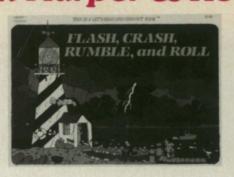
Bits and Bytes

A BIT is the smallest piece of information a computer can use. One BYTE is eight bits. A computer BUG is an error in a computer program. With this dictionary children can learn the meanings of the most commonly used computer words. Before you know it, they'll be able to say, "My computer crashed, so I booted it. Then I wrote a program without a bug"—and understand what they said. By Seymour Simon, \$3.95 [A]



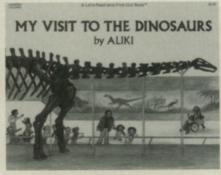
Comets

Long ago, people were afraid of comets. They thought a comet was a warning of something terrible about to happen. We know this is not so. Comets are masses of dust, stones, ice and gas that appear and disappear in the sky. Children can read all about comets and discover why they have fascinated people for thousands and thousands of years. By Franklyn M. Branley, \$3.95 [B]



Flash, Crash, Rumble, and Roll

Everyone knows what a thunderstorm is. Big, dark clouds form in the sky. The rain falls fast and hard. Lightning flashes again and again, and you hear the thunder crash, rumble and roll. Curl up in a chair and find out not only why all these things happen but how to stay safe in the storm. By Barbara and Ed Emberley, \$3.95 [C]



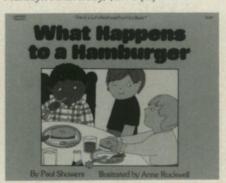
My Visit to the Dinosaurs

Come along on a visit to the dinosaur hall. Walk through the museum, see the skeletons of giant creatures who ruled the earth millions of years ago. Meet Brachiosaurus, Stegosaurus and Diplodocus. See meat eaters and plant eaters, dinosaurs with over 1,000 teeth, dinosaurs that could swim ... and of course, the king of them all, the gigantic Tyrannosaurus rex. By Aliki, \$3.95 [D]



The Planets in Our Solar System

Here is a very simple and accurate introduction to our solar system and to the nine planets that go around our sun. The clear and lively text, which includes instructions for making two models, is illustrated with close-up photographs, and sprightly drawings. By Franklyn M. Branley, \$3.95 [E]



What Happens to a Hamburger

That first mouth-watering sniff says a hamburger *tastes* good, but what happens next? Digestion! In the mouth, the stomach and the intestines, food is turned into bones and muscles and energy for the body to use. Hamburgers, carrots, scrambled eggs, milk—all these good foods make children strong and healthy and help them grow. By Paul Showers, \$3.95 [F]

All books are \$3.95 each, minimum of 3 books per order.

payable the boo	to Science	e News Book 00 to cover h ler 3 books.	Order Serv	rice for the p	orice of
A	В	С	D	E	F
Name_					
Address	s				
City					

Science News Book Order Service

1719 N St., NW, Washington, DC 20036